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(54) **Information storage medium, recording and reproduction apparatus, method of controlling recording and reproduction apparatus, control program, and communication system**

(57) An optical disk (100) stores operation identification information which causes a recording and reproduction apparatus (1) into which the optical disk (100) is inserted to recognize the optical disk (100) as a disk causing the recording and reproduction apparatus (1) to perform a commercial transaction over a network, and which serves as a trigger for causing the recording and reproduction apparatus (1) to perform the commercial trans-

action. Hence, by causing the recording and reproduction apparatus (1) to recognize the operation identification information before the contents is downloaded, it is possible to prevent important information such as personal information stored in the optical disk (100) from leaking over the network via the recording and reproduction apparatus (1). This as a result allows improvement in security against information leakage.

FIG. 1 (a)

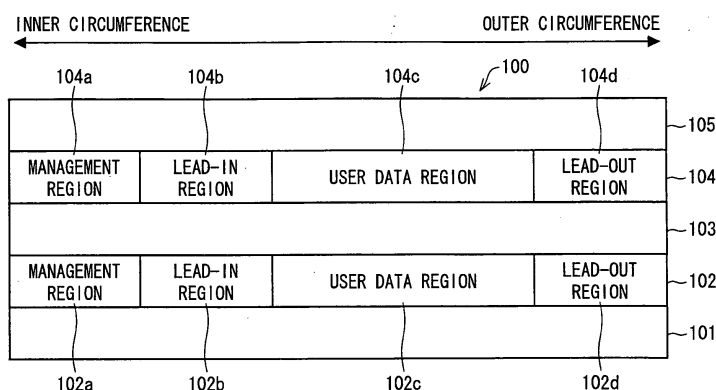
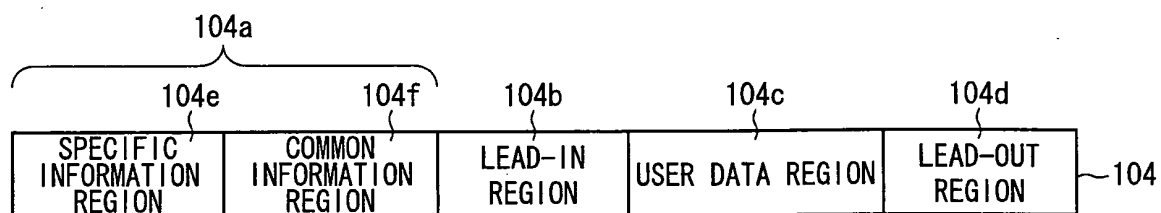


FIG. 1 (b)





EUROPEAN SEARCH REPORT

Application Number
EP 11 00 1273

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 1 174 812 A2 (SONY CORP [JP]) 23 January 2002 (2002-01-23)	1-5,7	INV.
A	* the whole document *	6	G11B20/00 G11B20/12 G11B27/10
X	WO 2008/120377 A1 (PIONEER CORP [JP]; KATATA KEIJI [JP]; KODA TAKESHI [JP]; TAKAKUWA NOBU) 9 October 2008 (2008-10-09)	1-3,5,7	G11B27/11 G11B27/32 G11B27/34
Y	* abstract; figures 1,2 * & US 2010/115026 A1 (KATATA KEIJI [JP] ET AL) 6 May 2010 (2010-05-06)	8,9	G06F21/00 H04N7/173 G06Q30/00 G06Q20/00
X	US 2003/046245 A1 (OSHIMA MITSUAKI [JP] ET AL) 6 March 2003 (2003-03-06)	1,4-7	
	* paragraph [0026] - paragraph [0067] * * paragraph [0078] - paragraph [0089] *		
X	US 2005/080877 A1 (SAKO YOICHIRO [JP] ET AL) 14 April 2005 (2005-04-14)	1,2,5,7	
	* paragraph [0028] - paragraph [0123] *		
X	EP 1 267 244 A2 (EASTMAN KODAK CO [US]) 18 December 2002 (2002-12-18)	1,4,5,7	
A	* paragraph [0035] - paragraph [0054] * * paragraph [0069] - paragraph [0086] *	6	G11B G06F H04N G06Q
Y	US 2008/232220 A1 (YAMAOKA MASARU [JP]) 25 September 2008 (2008-09-25)	8,9	
A	* paragraph [0037] - paragraph [0188] *	1-7	
A	EP 1 115 117 A2 (MATSUSHITA ELECTRIC IND CO LTD [JP]) 11 July 2001 (2001-07-11)	1,5,6	
	* paragraph [0026] - paragraph [0051]; figures 1A,1B *		
X	EP 1 381 026 A1 (KENWOOD CORP [JP]) 14 January 2004 (2004-01-14)	10-15	
	* paragraph [0082] - paragraph [0376] *		
	-/--		
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 21 October 2011	Examiner Gil Zamorano, Gunnar
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EUROPEAN SEARCH REPORT

Application Number
EP 11 00 1273

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2002/178145 A1 (ISHIDA TAKEHISA [JP]) 28 November 2002 (2002-11-28) * paragraph [0074] - paragraph [0111] * -----	10-15	
X	US 2004/083178 A1 (TANAKA TOSHIFUMI [JP] ET AL) 29 April 2004 (2004-04-29) * paragraph [0051] - paragraph [0110] * -----	10-15	
X	JP 2005 025365 A (SONY CORP) 27 January 2005 (2005-01-27) * the whole document * -----	10-15	
A	US 2008/163326 A1 (ZHANG GUO BIAO [US]) 3 July 2008 (2008-07-03) * paragraph [0037] - paragraph [0061] * -----	10-15	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 21 October 2011	Examiner Gil Zamorano, Gunnar
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 11 00 1273

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-9

Information storage medium stores operation identification
information triggering a commercial transaction of a
recording/reproducing apparatus over a network

2. claims: 10-15

A telecommunications carrier allots an identifier to a
recording/reproducing apparatus or an information storage
medium to manage connection rights and billing operations.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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21-10-2011

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 1174812	A2	23-01-2002	CN	1330470 A	09-01-2002
			JP	2002008115 A	11-01-2002
			KR	20020006575 A	23-01-2002
			SG	103295 A1	29-04-2004
			US	2002042777 A1	11-04-2002
			US	2005033661 A1	10-02-2005

WO 2008120377	A1	09-10-2008	US	2010115026 A1	06-05-2010

US 2003046245	A1	06-03-2003	US	2003177098 A1	18-09-2003

US 2005080877	A1	14-04-2005	CN	1685419 A	19-10-2005
			EP	1553586 A1	13-07-2005
			WO	2004036573 A1	29-04-2004
			JP	2004134044 A	30-04-2004
			KR	20050051581 A	01-06-2005

EP 1267244	A2	18-12-2002	CN	1391375 A	15-01-2003
			JP	2003115163 A	18-04-2003
			US	2003002671 A1	02-01-2003

US 2008232220	A1	25-09-2008	NONE		

EP 1115117	A2	11-07-2001	CN	1304137 A	18-07-2001
			CN	1897147 A	17-01-2007
			DE	60114055 T2	13-07-2006
			KR	20010070430 A	25-07-2001
			TW	561471 B	11-11-2003
			US	2005238333 A1	27-10-2005
			US	2001007545 A1	12-07-2001

EP 1381026	A1	14-01-2004	DE	02717175 T1	08-07-2004
			WO	02089111 A1	07-11-2002
			US	2004031377 A1	19-02-2004
			US	2008060504 A1	13-03-2008

US 2002178145	A1	28-11-2002	JP	2002324349 A	08-11-2002

US 2004083178	A1	29-04-2004	JP	2003271458 A	26-09-2003

JP 2005025365	A	27-01-2005	NONE		

US 2008163326	A1	03-07-2008	NONE		

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82